

# Intussusception associated with bowel metastasis in a patient with malignant melanoma

Intussusception in a patient with malignant melanoma

Arslan Hasan Kocamaz<sup>1</sup>, Ömer Kişi<sup>2</sup>

<sup>1</sup> Department of General Surgery, Kayseri State Hospital, Kayseri

<sup>2</sup> Department of General Surgery, Faculty of Medicine, Necmettin Erbakan University Konya, Turkey

## Abstract

Malignant melanoma originates from the malignant transformation of melanocytes, the pigment-producing cells of the body. Primary and metastatic malignant melanomas are rare in the gastrointestinal tract [1]. While melanoma most commonly occurs in the skin, it can also develop in any tissue where melanocytes are present, including the eyes, upper gastrointestinal system, anus, and mucosa of the vagina. It accounts for 3-4% of all cancers [2]. Malignant melanoma is known to cause acute intestinal obstruction through intussusception. In this case, sudden abdominal pain in a patient with routine follow-up for malignant melanoma was found to be due to intussusception secondary to melanoma metastasis, necessitating surgical intervention.

## Keywords

Small Intestine, Malignant Melanoma, Intussusception

DOI: 10.4328/ACAM.22356 Received: 2024-08-06 Accepted: 2024-09-09 Published Online: 2024-09-19 Printed: 2024-10-20 Ann Clin Anal Med 2024;15(Suppl 2):S99-101

Corresponding Author: Arslan Hasan Kocamaz, Department of General Surgery, Kayseri State Hospital, Kayseri, Turkey.

E-mail: md.ahkocamaz@gmail.com P: +90 530 967 64 11

Corresponding Author ORCID ID: <https://orcid.org/0000-0002-5257-9611>

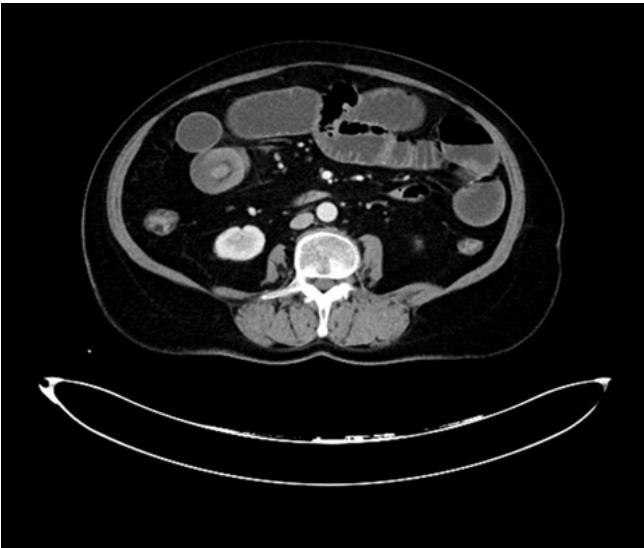
Other Authors ORCID ID: Ömer Kişi, <https://orcid.org/0000-0001-8606-2453>

Introduction

Malignant melanoma is a neoplasm originating from melanocytes in the skin and is known as the most dangerous type of skin cancer. Recent improvements in the early diagnosis and treatment of melanoma have significantly improved the outlook of the disease. However, melanoma’s high risk for metastasis and the presence of treatment-resistant subgroups remain major challenges in managing the disease. Although primary malignant melanoma of the small intestine is rare, gastrointestinal metastases of cutaneous and ocular melanomas are relatively common [3]. While small bowel metastases in living patients with malignant melanoma are recognized in only about 4% of cases, autopsy studies have shown that the rate of metastases in the small intestine can rise to as high as 60% [4]. We present a case of acute jejuno-jejunal intussusception due to malignant melanoma with intestinal metastasis detected by tomography.

Case Report

A 68-year-old patient, diagnosed with ocular malignant melanoma with skin metastasis 6 years ago, had been undergoing



**Figure 1.** CT findings of invagination associated with malignant melanoma



**Figure 2.** Surgical findings of invagination associated with malignant melanoma

treatment. The patient experienced colicky abdominal pain and bilious vomiting persisting for three days. Physical examination revealed abdominal distension. Oral and intravenous contrast-enhanced abdominal tomography showed wall thickening and obstruction in proximal small bowel loops (Figure 1). Dilatation was observed in bowel loops proximal to this level. The patient was diagnosed with acute small bowel obstruction, and surgical intervention was decided. During surgical exploration, intussusception due to melanoma metastasis was observed in the jejunal wall at 25-30 cm distal to the Treitz ligament (Figure 2). About 30 cm of the small intestine was removed, followed by an end-to-end jejuno-jejunal anastomosis.

Discussion

Intestinal intussusception is commonly seen in young children but is rare in adults [5]. Intussusception in children is generally managed with medical treatment, and surgery is rarely required. Although 90% of intussusception cases in children are idiopathic, 10% are due to triggering conditions, in adults, intussusception is typically caused by an underlying pathology. Meckel’s diverticulum, colon polyps, lipomas, lymphomas, leiomyomas, or carcinoids can cause intussusception in adults. Various radiological findings specific to intussusception can be detected using ultrasonography and tomography. If intussusception leads to a mechanical small bowel ileus in adults, surgical resection is preferred [6]. The aim of this case presentation is to emphasize that while intussusception is rare in adults, it should always be considered if the patient has a diagnosis of malignant melanoma, as secondary intussusception may occur.

Malignant melanoma is the most common type of metastatic tumor in the bowel. In a study by Branum, 102 cases of small bowel or colon metastasis were found among 6000 melanoma patients. In 27% of patients with bowel involvement, obstruction or intussusception developed. The life expectancy after surgical metastasis resection was found to be significantly higher compared to patients receiving only palliative chemotherapy [7].

Conclusion

Malignant melanoma tends to metastasize to the bowel. In melanoma patients with bowel symptoms, tomography can be used to assess the extent of bowel metastases. Bowel intussusception due to bowel metastasis may present as a complication of malignant melanoma. Although intussusception is rare in adults, secondary intussusception in adults with a diagnosis of malignant melanoma should be considered in patients with appropriate clinical findings. In such cases, surgical intervention and resection may be necessary.

Scientific Responsibility Statement

The authors declare that they are responsible for the article’s scientific content including study design, data collection, analysis and interpretation, writing, some of the main line, or all of the preparation and scientific review of the contents and approval of the final version of the article.

Animal and human rights statement

All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Conflict of interest

The authors declare that there is no conflict of interest.

## References

1. Kulahci O, Turan G. Primary and Metastatic Malignant Melanomas of The Digestive System. *Selcuk Med J*. 2020;36(4):300-306.
2. Silva S, Tenreiro N, Melo A, Lage J, Moreira H, Próspero F, et al. Metastatic melanoma: An unusual cause of gastrointestinal bleeding and intussusception - A case report. *Int J Surg Case Rep*. 2018;53:144-146.
3. Mattit A, Marrawi I, Kheir S, Khamis T, Qatleesh S, Ousta MA. Small bowel melanoma causing obstruction: A case report and a literature review. *Int J Surg Case Rep*. 2024;116:109388.
4. Blessing IC, Park K, McLaren K, Eremin O. Gastrointestinal involvement with metastatic melanoma. *J R Coll Surg Edinb*. 1986;5:293-5.
5. Vilar A, Serrano E, Brabyn P, Diez MM, Gutierrez A. Multiple giant cutaneous metastasis and ileal intussusception from an unknown melanoma: A case report. *Med Int (Lond)*. 2024;4(5):51.
6. Ahdi HS, Kruchko D, Asado N, Kakodkar S. A Case of Jejuno-Jejunal Intussusception Caused by Underlying Metastatic Melanoma. *Cureus*. 2023;15(3).
7. Branum GD, Seigler HF. Role of surgical intervention in the management of intestinal metastases from malignant melanoma. *Am J Surg*. 1991;162:428-431.

## How to cite this article:

Arslan Hasan Kocamaz, Ömer Kişi. Intussusception associated with bowel metastasis in a patient with malignant melanoma. *Ann Clin Anal Med* 2024;15(Suppl 2):S99-101